Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended): An expression cassette, comprising

a polynucleotide sequence operably linked to a promoter, wherein the polynucleotide sequence has at least 90% sequence identity to ~~the polynucleotide sequence presented in Figure 8~~ (SEQ ID NO:30[[)]]; ~~Figure 9~~ (SEQ ID NO:31[[)]]; or ~~Figure 10~~ (SEQ ID NO:32[[)]].

2. (Original): The expression cassette of claim 1, further comprising one or more nucleic acids encoding one or more viral polypeptides or antigens.

3. (Previously Presented): The expression cassette of claim 2, wherein the viral polypeptides or antigens are selected from the group consisting of Gag, Env, vif, vpr, tat, rev, vpu, nef and combinations thereof.

4. (Previously Presented): The expression cassette of claim 1, further comprising one or more nucleic acids encoding one or more cytokines.

5. (Previously Presented): A recombinant expression system for use in a selected host cell, comprising, the expression cassette of claim 1, and wherein said polynucleotide sequence is operably linked to control elements compatible with expression in the selected host cell.

6. (Original): The recombinant expression system of claim 5, wherein said control elements are selected from the group consisting of a transcription promoter, a transcription enhancer element, a transcription termination signal, polyadenylation sequences, sequences for optimization of initiation of translation, and translation termination sequences.

7. (Previously Presented): The recombinant expression system of claim 6, wherein said transcription promoter is selected from the group consisting of CMV, CMV+intron A, SV40, RSV, HIV-Ltr, MMLV-ltr, and metallothionein.

8. (Previously Presented): A cell comprising the expression cassette of claim 1, and wherein said polynucleotide sequence is operably linked to control elements compatible with expression in the selected cell.

9. (Original): The cell of claim 8, wherein the cell is a mammalian cell.

10. (Original): The cell of claim 9, wherein the cell is selected from the group consisting of BHK, VERO, HT1080, 293, RD, COS-7, and CHO cells.

11. (Original): The cell of claim 10, wherein said cell is a CHO cell.

12. (Original): The cell of claim 8, wherein the cell is an insect cell.

13. (Original): The cell of claim 12, wherein the cell is either *Trichoplusia ni* (Tn5) or Sf9 insect cells.

14. (Original): The cell of claim 8, wherein the cell is a bacterial cell.

15. (Original): The cell of claim 8, wherein the cell is a yeast cell.

16. (Original): The cell of claim 8, wherein the cell is a plant cell.

17. (Original): The cell of claim 8, wherein the cell is an antigen presenting cell.

18. (Original): The cell of claim 17, wherein the antigen presenting cell is a lymphoid cell selected from the group consisting of macrophage, monocytes, dendritic cells, B-cells, T-cells, stem cells, and progenitor cells thereof.

19. (Original): The cell of claim 8, wherein the cell is a primary cell.

20. (Currently Amended): The cell of claim 8, wherein the cell is an immortalized cell. [[21.]]

21. (Previously Presented): The cell of claim 8, wherein the cell is a tumor cell.

22. (Previously Presented): A composition for generating an immunological response, comprising the expression cassette of claim 1.

23. (Original): The composition of claim 22, further comprising one or more *Pol* polypeptides.

24. (Original): The composition of claim 23, further comprising an adjuvant.

25. (Previously Presented): A composition for generating an immunological response, comprising the expression cassette of claim 2.

26. (Original): The composition of claim 25, further comprising a *Pol* polypeptide.

27. (Currently Amended): The composition of claim 26, further comprising a polypeptide encoded by a polynucleotide sequence operably linked to a promoter, wherein the polynucleotide sequence encodes an HIV *Pol* polypeptide that elicits a *Pol*-specific immune response, and further wherein the polynucleotide sequence encoding said polypeptide comprises a nucleotide sequence having at least 90% sequence identity to ~~the sequence presented of Figure 8~~ (SEQ ID NO:30[[)]]; ~~Figure 9~~ (SEQ ID NO:31[[)]]; or ~~Figure 10~~ (SEQ ID NO:32[[)]].

28. (Original): The composition of claim 27, further comprising an adjuvant.

29. (Previously Presented): A method of generating an immune response in a subject, comprising, introducing the composition of claim 22 into said subject under conditions that are compatible with expression of said expression cassette in said subject.

30. (Original): The method of claim 29, wherein said expression cassette is introduced using a gene delivery vector.

31. (Original): The method of claim 30, wherein the gene delivery vector is a non- viral vector.

32. (Original): The method of claim 30, wherein said gene delivery vector is a viral vector.

33. (Original): The method of claim 32, wherein said gene delivery vector is a Sindbis virus derived vector.

34. (Original): The method of claim 32, wherein said gene delivery vector is a retroviral vector.

35. (Original): The method of claim 32, wherein said gene delivery vector is a lentiviral vector.

36. (Previously Presented): The method of claim 30, wherein said composition is delivered by using a particulate carrier.

37. (Original): The method of claim 30, wherein said composition is coated on a gold or tungsten particle and said coated particle is delivered to said subject using a gene gun.

38. (Original): The method of claim 30, wherein said composition is encapsulated in a liposome preparation.

39. (Currently Amended): The method of any one of claims 30-38, wherein said subject is a mammal.

40. (Original): The method of claim 39, wherein said mammal is a human.

41-42 (Canceled)

43. (Previously Presented): The method of claim 29, where the method further comprises administration of a polypeptide derived from an HIV.

44. (Original): The method of claim 43, wherein administration of the polypeptide to the subject is carried out before introducing said expression cassette.

45. (Original): The method of claim 43, wherein administration of the polypeptide to the subject is carried out concurrently with introducing said expression cassette.

46. (Original): The method of claim 43, wherein administration of the polypeptide to the subject is carried out after introducing said expression cassette.

47. (Previously Presented): The expression cassette of claim 2, wherein the viral polypeptides or antigens are selected from the group consisting of polypeptides derived from hepatitis B, hepatitis C and combinations thereof.

48. (Currently Amended): An expression cassette comprising the polynucleotide sequence of SEQ ID NO: 30, SEQ ID NO: 31 or SEQ ID NO: 32.

49. (Previously Presented): The expression cassette of claim 48 further comprising a nucleotide sequence encoding a viral polypeptide selected from the group consisting of Gag, Env, vif, vpr, tat, rev, vpu, nef, and combinations thereof.

50. (Original): A composition for generating an immunological response in a mammal comprising the expression cassette of claim 48.

51. (Original): A method of generating an immune response in a mammal, the method comprising the step of intramuscularly administering the expression cassette of claim 48 to said mammal.

52. (Currently Amended): The expression cassette of claim 1, comprising a nucleotide sequence encoding an HIV-1 Pol polypeptide, wherein the catalytic center region of the Reverse-Transcriptase is modified to become non-functional, and wherein said nucleotide sequence has at least 90% sequence identity to ~~the polynucleotide sequence presented in Figure 9 (~~SEQ ID NO:31[[)]].

53 (Currently Amended): The expression cassette of claim 1, comprising a nucleotide sequence encoding an HIV-1 Pol polypeptide, wherein the catalytic center and the primer grip region of the Reverse-Transcriptase are modified to become non-functional, and wherein said nucleotide sequence has at least 90% sequence identity to ~~the polynucleotide sequence presented in Figure 10 (~~SEQ ID NO:32[[)]].